

WHAT IS CLAIMED IS:

1. An image processing device for displaying an image representing an object arranged in a virtual three-dimensional space, comprising:
 - 5 light source position acquisition means for acquiring a light source position set in said virtual three-dimensional space;
 - viewpoint position and viewing direction acquisition means for acquiring a viewpoint position and a viewing direction set in said virtual three-dimensional space;
- 10 highlight position calculation means for calculating a position of a highlight appearing on a surface of said object based on said viewpoint position;
- highlight intensity calculation means for calculating intensity of the highlight based on said light source position and said viewing direction;
- 15 semitransparent composition means for performing semitransparent composition of said image representing the highlight onto said image representing said object based on the position calculated by the highlight position calculation means and a semitransparent composition rate corresponding to the intensity calculated by the highlight intensity calculation means; and
- 20 image display means for displaying an image obtained by performing semitransparent composition of said image representing the highlight onto said image representing said object by said semitransparent composition means.
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2. The image processing device according to claim 1, wherein
said highlight position calculation means calculates the position
of the highlight based on said viewpoint position and said viewing
direction.

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3. The image processing device according to claim 1, wherein
said highlight position calculation means calculates the position
of the highlight based on said viewpoint position and said light source
position.

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4. The image processing device according to any of claims 1-3,
wherein

15 said highlight intensity calculation means calculates the
intensity of the highlight based on said viewing direction and the
direction connecting two of said light source position, said viewpoint
position, and said highlight position.

20 5. An image processing method for displaying an image representing
an object arranged in a virtual three-dimensional space, comprising:
a light source position acquisition step for acquiring a light
source position set in said virtual three-dimensional space;
25 a viewpoint position and viewing direction acquisition step for
acquiring a viewpoint position and a viewing direction set in said virtual
three-dimensional space;
a highlight position calculation step for calculating a position
of a highlight appearing on a surface of said object based on said viewpoint
position;

1 a highlight intensity calculation step for calculating intensity of the highlight based on said light source position and said viewing direction;

2 a semitransparent composition step for performing semitransparent
5 composition of said image representing the highlight onto said image representing said object based on the position calculated at said highlight position calculation step and a semitransparent composition rate corresponding to the intensity calculated at said highlight intensity calculation step; and

10 an image display step for displaying an image obtained by performing semitransparent composition of said image representing the highlight onto said image representing said object at said semitransparent composition step.

15 6. An information storage medium for storing a program for causing a computer to function as:

light source position acquisition means for acquiring a light source position set in a virtual three-dimensional space;

viewpoint position and viewing direction acquisition means for
20 acquiring a viewpoint position and a viewing direction set in said virtual three-dimensional space;

highlight position calculation means for calculating a position of a highlight appearing on a surface of an object arranged in said virtual three-dimensional space based on said viewpoint position;

25 highlight intensity calculation means for calculating intensity of the highlight based on said light source position and said viewing direction;

semitransparent composition means for performing semitransparent composition of said image representing the highlight onto said image representing said object based on the position calculated by said highlight position calculation means and a semitransparent composition rate corresponding to the intensity calculated by said highlight intensity calculation means; and

image display means for displaying an image obtained by performing semitransparent composition of said image representing the highlight onto said image representing said object by said semitransparent composition means.